

## ABSTRACT OF THE DISCLOSURE

A packet transfer device has a layer 2 switch and performs switching by referring to header information of a 3rd layer and higher layers. Input/output ports receives packets from and transmits packets to other devices connected to the packet transfer device. A header information extracting circuit extracts header information belonging to a 3rd layer (network layer) and higher layers of a network protocol from packets inputted from the respective input/output ports. A table stores header information and control information corresponding to the header information in association with each other. A control information acquiring circuit acquires control information corresponding to the header information extracted by the header information extracting circuit from the table. A processing circuit processes packets based on the control information acquired by the control information acquiring circuit.

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